

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An electronic device comprising:
a substrate; and
a film disposed above the substrate, the film ~~including:~~ consisting essentially of LaAlO₃, Al₂O₃, and La₂O₃, with the LaAlO₃ arranged as a layered structure of one or more monolayers [[:]] and the Al₂O₃ arranged as a layered structure of one or more monolayers.
2. (Currently Amended) ~~The electronic device of claim 1, wherein the film includes~~ An electronic device comprising:
a substrate; and
a film disposed above the substrate, the film including:
LaAlO₃ arranged as a layered structure of one or more monolayers;
Al₂O₃ arranged as a layered structure of one or more monolayers; and
La₂O₃ arranged as a layered structure of one or more monolayers.
3. (Currently Amended) The electronic device of claim [[1]] 2, wherein the film is substantially amorphous.
4. (Currently Amended) The electronic device of claim [[1]] 2, wherein the film exhibits a dielectric constant in the range from about 21 to about 25.
5. (Original) The electronic device of claim 1, wherein the film exhibits an equivalent oxide thickness (t_{eq}) in the range from about 1.5 Angstroms to about 5 Angstroms.
6. (Original) The electronic device of claim 1, wherein the film exhibits an equivalent oxide thickness (t_{eq}) of less than 3 Angstroms.

7. (Currently Amended) A transistor comprising:
- a body region between first and second source/drain regions in a substrate;
 - a film on the body region between the first and second source/drain regions, the film including ~~[[;]]~~ LaAlO₃, Al₂O₃, and La₂AlO₃ with the LaAlO₃ arranged as a layered structure of one or more monolayers ~~[[;]]~~ and the Al₂O₃ arranged as a layered structure of one or more monolayers; and
 - a gate coupled to the film;
- the ~~film~~ LaAlO₃ being formed by atomic layer deposition including:
- pulsing a lanthanum containing precursor into a reaction chamber containing ~~[[a]]~~ the substrate;
 - pulsing a first oxygen containing precursor into the reaction chamber;
 - pulsing an aluminum containing precursor into ~~[[a]]~~ the reaction chamber; and
 - pulsing a second oxygen containing precursor into the reaction chamber.
8. (Currently Amended) The transistor of claim 7, wherein pulsing ~~[[a]]~~ the lanthanum containing precursor ~~into a reaction chamber~~ includes pulsing a La(thd)₃ (thd = 2,2,6,6-tetramethyl-3,5- heptanedione) source gas into the reaction chamber.
9. (Currently Amended) The transistor of claim 7, wherein pulsing ~~[[a]]~~ the aluminum containing precursor ~~into the reaction chamber~~ includes pulsing a DMEAA source gas into the reaction chamber.
10. (Currently Amended) The transistor of claim 7, wherein pulsing ~~[[a]]~~ the aluminum containing precursor ~~into the reaction chamber~~ includes pulsing a trimethylaluminum source gas into the reaction chamber.
11. (Currently Amended) The transistor of claim 7, wherein the transistor further includes~~[[;]]~~ a floating gate and a floating gate dielectric situated between the ~~body region~~ film and the gate ~~[[; and]]~~ with the ~~[[a]]~~ floating gate dielectric disposed on the floating gate, separating the floating gate and the gate, the floating gate dielectric containing LaAlO₃ arranged

as a layered structure of one or more monolayers.

12. (Currently Amended) A transistor comprising:

a body region between first and second source/drain regions in a substrate;

a film on the body region between the first and second source/drain regions, the film ~~including~~ consisting essentially of LaAlO₃, Al₂O₃, and La₂O₃, with the LaAlO₃ arranged as a layered structure of one or more monolayers [[:]] and the Al₂O₃ arranged as a layered structure of one or more monolayers; and

a gate coupled to the film.

13. (Currently Amended) ~~The transistor of claim 12, wherein~~ A transistor comprising:

a body region between first and second source/drain regions in a substrate;

a film on the body region between the first and second source/drain regions, the film includes including La₂O₃, LaAlO₃, and Al₂O₃ with the LaAlO₃ arranged as a layered structure of one or more monolayers and the Al₂O₃ arranged as a layered structure of one or more monolayers; and

a gate coupled to the film.

14. (Currently Amended) The transistor of claim [[:]] 13, wherein the film is substantially amorphous.

15. (Currently Amended) The transistor of claim [[:]] 13, wherein the film exhibits a dielectric constant in the range from about 21 to about 25.

16. (Previously Presented) The transistor of claim 12, wherein the film exhibits an equivalent oxide thickness (t_{eq}) in the range from about 1.5 Angstroms to about 5 Angstroms.

17. (Previously Presented) The transistor of claim 12, wherein the film exhibits an equivalent oxide thickness (t_{eq}) of less than 3 Angstroms.

18. (Currently Amended) The transistor of claim [[12]] 13, wherein the transistor further includes:

- a floating gate situated between the body region and the gate; and
- a floating gate dielectric disposed between the floating gate and the gate.

19. (Currently Amended) The transistor of claim [[12]] 13, wherein the transistor further includes[[:]] a floating gate and a floating gate dielectric situated between the ~~body region film~~ and the gate [[: and]] with the [[a]] floating gate dielectric disposed between the floating gate and the gate, the floating gate dielectric containing LaAlO₃.

20. (Withdrawn - Currently Amended) A memory comprising:

a number of access transistors, each access transistor including:

- a body region between first and second source/drain regions in a substrate;
- a film on the body region between the first and second source/drain regions, the film including [[:]] La₂O₃, LaAlO₃, and Al₂O₃ with the LaAlO₃ arranged as a layered structure of one or more monolayers [[:]] and the Al₂O₃ arranged as a layered structure of one or more monolayers; and

a gate coupled to the film;

a number of word lines coupled to a number of the gates of the number of access transistors;

a number of source lines coupled to a number of the first source/drain regions of the number of access transistors; and

a number of bit lines coupled to a number of the second source/drain regions of the number of access transistors;

~~the film~~ LaAlO₃ being formed by atomic layer deposition including:

- pulsing a lanthanum containing source gas into a reaction chamber containing a substrate;
- pulsing an aluminum containing source gas into a reaction chamber.

21. (Withdrawn – Currently Amended) The memory of claim 20, wherein pulsing [[a]] the

lanthanum containing source gas ~~into a reaction chamber~~ includes pulsing a La(thd)₃ (thd = 2,2,6,6- tetramethyl-3,5- heptanedione) source gas into the reaction chamber.

22. (Withdrawn – Currently Amended) The memory of claim 20, wherein pulsing [[an]] the aluminum containing source gas into the reaction chamber includes pulsing a DMEAA source gas into the reaction chamber.

23. (Withdrawn – Currently Amended) The memory of claim 20, wherein pulsing [[an]] the aluminum containing source gas ~~into the reaction chamber~~ includes pulsing a trimethylaluminum source gas into the reaction chamber.

24. (Withdrawn) The memory of claim 20, wherein the memory is a flash memory.

25. (Withdrawn) The memory of claim 20, wherein the memory is a dynamic read access memory.

26. (Withdrawn – Currently Amended) A memory comprising:
a number of access transistors, each access transistor including:
a body region between first and second source/drain regions in a substrate;
a film on the body region between the first and second source/drain regions, the film including [[:]] La₂O₃, LaAlO₃, and Al₂O₃ with the LaAlO₃ arranged as a layered structure of one or more monolayers [[;]] and the Al₂O₃ arranged as a layered structure of one or more monolayers; and
a gate coupled to the film;
a number of word lines coupled to a number of the gates of the number of access transistors;

a number of source lines coupled to a number of the first source/drain regions of the number of access transistors; and

a number of bit lines coupled to a number of the second source/drain regions of the number of access transistors.

27. (Withdrawn) The memory of claim 26, wherein the film exhibits a dielectric constant in the range from about 21 to about 25.

28. (Withdrawn) The memory of claim 26, wherein the film exhibits an equivalent oxide thickness (t_{eq}) in the range from about 1.5 Angstroms to about 5 Angstroms.

29. (Withdrawn – Currently Amended) The memory of claim 26, wherein each access transistor further includes ~~[[:]]~~ a floating gate and a floating gate dielectric situated between the ~~body region film~~ and the gate ~~[[; and]]~~ with the ~~[[a]]~~ floating gate dielectric disposed between the floating gate and the gate, the floating gate dielectric containing LaAlO₃ arranged as a layered structure of one or more monolayers.

30. (Withdrawn) The memory of claim 26, wherein the memory is a dynamic read access memory.

31. (Withdrawn) The memory of claim 26, wherein the memory is a flash memory.

32. (Withdrawn – Currently Amended) An information handling device comprising:
a processor;
a memory, the memory including:

a number of access transistors, each access transistor having:

first and second source/drain regions in a substrate;

a body region between the first and second source/drain regions;

a film on the body region between the first and second source/drain regions, the film including ~~[[:]]~~ La₂O₃, LaAlO₃, and Al₂O₃ with the LaAlO₃

arranged as a layered structure of one or more monolayers [[:]] and the Al₂O₃

arranged as a layered structure of one or more monolayers; and

a gate coupled to the film;

a number of word lines coupled to a number of the gates of the number of access transistors;

a number of source lines coupled to a number of the first source/drain regions of the number of access transistors;

a number of bit lines coupled to a number of the second source/drain regions of the number of access transistors; and

a system bus that couples the processor to the memory array;

the ~~film~~ LaAlO₃ being formed by atomic layer deposition including:

pulsing a lanthanum containing source gas into a reaction chamber containing the substrate; and

pulsing an aluminum containing source gas into the reaction chamber.

33. (Withdrawn – Currently Amended) The information handling device of claim 32, wherein pulsing [[a]] the lanthanum containing source gas ~~into a reaction chamber~~ includes pulsing a La(thd)₃ (thd = 2,2,6,6- tetramethyl-3,5- heptanedione) source gas into the reaction chamber.

34. (Withdrawn – Currently Amended) The information handling device of claim 32, wherein pulsing [[a]] the aluminum containing source gas ~~into the reaction chamber~~ includes pulsing a DMEAA source gas into the reaction chamber.

35. (Withdrawn – Currently Amended) The information handling device of claim 32, wherein pulsing [[a]] the aluminum containing source gas ~~into the reaction chamber~~ includes pulsing a trimethylaluminum source gas into the reaction chamber.

36. (Withdrawn) The information handling device of claim of claim 32, wherein each access transistor further includes:

- a floating gate situated between the body region and the gate; and
- a floating gate dielectric disposed between the floating gate and the gate.
37. (Withdrawn) The information handling device of claim 32, wherein the information handling device is a computer.
38. (Withdrawn – Currently Amended) An information handling device comprising:
- a processor;
 - a memory, the memory including:
 - a number of access transistors, each access transistor having:
 - first and second source/drain regions in a substrate;
 - a body region between the first and second source/drain regions;
 - a film on the body region between the first and second source/drain regions, the film including [[;]] La₂O₃, LaAlO₃, and Al₂O₃ with the LaAlO₃ arranged as a layered structure of one or more monolayers [[;]] and the Al₂O₃ arranged as a layered structure of one or more monolayers; and
 - a gate coupled to the film;
 - a number of word lines coupled to a number of the gates of the number of access transistors;
 - a number of source lines coupled to a number of the first source/drain regions of the number of access transistors; and
 - a number of bit lines coupled to a number of the second source/drain regions of the number of access transistors; and
 - a system bus that couples the processor to the memory array.
39. (Withdrawn) The information handling device of claim 38, wherein the film exhibits a dielectric constant in the range from about 9 to about 30.
40. (Withdrawn) The information handling device of claim 38, wherein the film exhibits an equivalent oxide thickness (t_{eq}) in the range from about 1.5 Angstroms to about 5 Angstroms.

41. (Withdrawn) The information handling device of claim 38, wherein the memory is a flash memory.
42. (Withdrawn) The information handling device of claim 38, wherein the memory is a dynamic read access memory.
43. (Withdrawn – Currently Amended) The information handling device of claim 38, wherein each access transistor further includes [[:]] a floating gate and a floating gate dielectric situated between the ~~body-region film~~ and the gate [[: and]] with the [[a]] floating gate dielectric disposed between the floating gate and the gate, the floating gate dielectric containing LaAlO₃.
44. (Withdrawn) The information handling device of claim 38, wherein the processor is a microprocessor.
45. (Withdrawn) The information handling device of claim 38, wherein the information handling device is a computer.